

CLAIMS

What is claimed is:

1. A dielectric bias system for communicating a signal between (a) a first electrical device having an output connection to supply the signal and (b) a second electrical device having an input connection to receive the signal, the system comprising:
 - a first conduction path;
 - dielectric material positioned along said first conduction path such that transmission of a signal along said first conduction path tends to change the transmission properties of said first conduction path toward a relatively steady state, as said dielectric material is exposed to said signal; and
 - a means for impressing a bias potential across said dielectric material, the bias impressing means including at least one conductor independent of the first conduction path.
2. The dielectric bias system of Claim 1, in which said bias impressing means includes at least two conductors independent of the first conduction path.
3. The dielectric bias system of Claim 1 or Claim 2, wherein the bias impressing means includes an external energy source.
4. The dielectric bias system of Claim 3, wherein the external energy source is a battery.
5. The dielectric bias system of Claim 1, wherein the bias potential impressing means is an AC/DC converter.
6. The dielectric bias system of Claim 1, wherein the signal is audio.
7. The dielectric bias system of Claim 1, wherein the signal is video.
8. A dielectric bias system comprising:

a means for communicating a signal between a first electrical device having an output connection to supply the signal, and a second electrical device having an input connection to receive the signal, the communicating means comprising a first conduction path;

5 a means for receiving a bias potential, the receiving means associated with the first conduction path;

a dielectric associated with the receiving means; and

a means for impressing the bias potential across a selected portion of the receiving means such that the bias potential is impressed across the dielectric, the bias potential impressing means associated with a second conduction path independent of the first conduction path.

10 9. A dielectric bias system comprising:

a means for communicating an electrical signal along a signal path connectable between a first electrical device having an output connection to supply the electrical signal, and a second electrical device having an input connection to receive the electrical signal, the communication means including;

15 a first conductor defining the signal path;

a second conductor;

a dielectric associated with the first and the second conductor; and

a means for impressing a bias potential across the dielectric such that the bias potential is not a source of current in the signal path.

20 10. A system for communicating a voltage varying electrical signal along a signal path between electrical devices, including:

a first conductor defining a signal path for communicating the electrical signal;

a second conductor independent of the first conductor;

a dielectric associated with the first and second conductors; and
an external energy source for electrically biasing the dielectric such that the bias is not a source of current in the signal path.

11. The system of Claim 10, wherein the external energy source is a battery.

5 12. The system of Claim 10, wherein the external energy source is an AC/DC converter.

13. The system of Claim 10, wherein the signal is audio.

14. The system of Claim 10, wherein the signal is video.

15. The system of Claim 13, wherein the first and second conductors and dielectric
10 are part of an audio cable, and said external energy source is mounted on said cable.

16. The system of Claim 14, wherein the first and second conductors and dielectric are part of a video cable, and said external energy source is mounted on said cable.

17. A method of biasing a dielectric comprising the steps of:

providing a dielectric bias system having a means of communicating a voltage varying
15 electrical signal along a signal path between electrical devices, the communicating means including a first conductor defining the signal path for communicating the electrical signal; a second conductor; a dielectric associated with the first conductor and the second conductor; an external source for impressing a bias across the dielectric;

impressing the bias potential across the dielectric such that the bias potential is not a
20 source of current in the signal path;

supplying the voltage varying electrical signal between the electrical devices;

removing the voltage varying electrical signal between the electrical devices; and

maintaining the bias potential impressed across the dielectric.

18. The method of Claim 17, wherein the bias potential impressing mean is a battery.

19. The method of Claim 17, wherein the signal is audio.

20. The method of Claim 17, wherein the signal is video.

21. The method of Claim 19, wherein the communicating means is an audio cable.

5 22. The method of Claim 20, wherein the communicating means is a video cable.

23. A method of maintaining relatively steady electrical state within cables for stereo speakers, interconnects, and the like, including the steps of:

providing a cable having a first path for transmitting a signal across the cable, said cable including dielectric material positioned along at least some portion of the first path;

10 providing at least one conductor which is not in the first path, said at least one conductor operatively positioned adjacent at least a portion of said dielectric material; and

applying an energy source to said at least one conductor.

24. The method of Claim 23, in which said step of applying an energy source is accomplished by a battery operatively affixed to the cable.

15 25. A method of cable “run-in” for effectively turning a cable into a non-discharging capacitor, including the steps of:

providing a cable having a signal path and dielectric material associated with that path;

applying a bias potential to the dielectric material from an energy source other than the signal; and

20 maintaining that application of bias potential from said other energy source independent of the signal.